


Form PTO-1449 U.S. Department of Commerce Patent and Trademark Office LIST OF PRIOR ART CITED BY APPLICANT (Use several sheets if necessary)		Atty. Docket No.: EP 1021-CIP Applicant: Kennedy, et al. Filing Date:		Serial No.: 09/732967 Group: 1711		JCS11 U.S. 09/73296  12/03/00		
U.S. PATENT DOCUMENTS								
*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing date if appropriate		
Jan [Handwritten line through rows]	AA	5,578,743	Ho et al.			 <div></div> 		
	AB	5,387,664	02/07/95	Kawasaki et al.				
	AC	5,260,389	11/09/93	Resconi et al.				
	AD	5,208,304	05/04/93	Waymouth				
	AE	5,104,956	04/14/92	Waymouth				
	AF	4,605,704	08/12/86	Eastman et al.				
	AG	4,363,903	12/14/82	Yamane et al.				
	AH	4,032,594	06/28/77	Serratore et al.				
	AI	3,804,919	04/16/74	Schrage et al.				
	AJ	3,472,830	10/14/69	Baxter et al.				
	AK	3,291,782	12/13/66	Anderson et al.				
FOREIGN PATENT DOCUMENTS								
	Document Number	Date	Country	Class	Subclass	Translation Yes No		
	AL							
	AM							
	AN							
	AO							
	AP							
OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
J	AR	Encyclopedia of PVC, Vol. 1, 2 nd Ed., Marcel Dekker, Inc. New York, (1986); pp. 570-605						
J	AS	Heat Degradation of PVC Stabilized by Treatment with Alkylaluminum Compounds, Gupta and Kennedy, Makromol.Sci.-Chem., A12(10), (1978) pp. 1407-1426						
J	AT	The Discoloration of PVC-I, Correlation Between the Dehydrochlorination and Discoloration of PVC, Levai and Ocskay, European Polymer Journal, Vol. 10, Pergamon Press (1974), pp. 1121-1125						
EXAMINER <u>Jeffrey Mull</u> ; DATE CONSIDERED <u>5-02</u>								
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								

Form PTO-1449 U.S. Department of Commerce Patent and Trademark Office LIST OF PRIOR ART CITED BY APPLICANT (Use several sheets if necessary)				Atty. Docket No.: EP 1021-CIP		Serial No.: 09/ 732 968	
				Applicant: Kennedy, et al.			
				Filing Date:			
				Group: 1711			

U.S. PATENT DOCUMENTS							
*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing date if appropriate	
D	AA	2,612,493	Sparks et al.				
D	AB	2,384,975	Sparks et al.				
D	AC	3,435,020	Olson				
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FOREIGN PATENT DOCUMENTS							
Document Number	Date	Country	Class	Subclass	Translation Yes No		
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
D	AR	✓	Living Carbocationic Polymerization. XXX. One-Pot Synthesis of Allyl-Terminated Linear and Tri-Arm Star Polyisobutylenes, and Epoxy- and Hydroxy-Telechelics Therefrom, Ivan and Kennedy, <u>Journal of Polymer Science: Part A: Polymer Chemistry</u> , Vol. 28, (1990), pp. 89-104
D	AS	✓	Determination of Tertiary Chlorine Structures in PVC, Buruiana, Airinei, Robila and Caraculacu, <u>Polymer Bulletin</u> 3, (1989), pp. 267-271
D	AT	✓	Graft Modification of PVC and Related Reactions, Thame and Lundberg, <u>Journal of Polymer Science: Part A-1</u> , Vol. 10, (1972), pp. 2507-2525

EXAMINER	DATE CONSIDERED	
Jeffrey M. L...	5.02	

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				Applicant: Kennedy, et al.			
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U.S. PATENT DOCUMENTS							
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
10	AR	✓	<i>Determination of Unsaturated Structures in PVC by Means of Fourier Transform ¹H-NMR Spectroscopy</i> , Caraculacu and Bezdadea, <u>Journal of Polymer Science</u> : Polymer Chemistry Edition, Vol. 15, (1977), pp. 611-620
11	AS	✓	<i>Determination of Labile Chlorine in PVC with the Aid of Phenolysis Reaction</i> , Buruiana, Robila and Caraculacu, <u>European Polymer Journal</u> , Vol. 13, (1977) pp. 21-24, Pergamon Press
12	AT	✓	<i>New Approaches to the Study of Labile Structures in PVC by Phenolysis</i> , Muangos, Martínez, and Millán, <u>European Polymer Journal</u> , Vol. 18, (1982), pp. 731-734, Pergamon Press

EXAMINER	DATE CONSIDERED
Jeffrey Mullis	5-62

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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AR	✓	<i>New Telechelic Polymers and Sequential Copolymers by Polyfunctional Initiator-Transfer Agents (Inifers). III. Synthesis and Characterization of a Poly(α-Methylstyrene-b-Isobutylene-b-α-Methylstyrene), Kennedy and Smith, Journal of Polymer Science: Polymer Chemistry Edition, Vol. 18, 1539-1546 (1980).</i>
	AS	✓	<i>New Telechelic Polymers and Sequential Copolymers by Polyfunctional Initiator-Transfer Agents (Inifers). XVII. Epoxy and Aldehyde Telechelic Polyisobutylenes, Kennedy, Chang, and Francik, Journal of Polymer Science: Polymer Chemistry Edition, Vol. 20, 2809-2817 (1982)</i>
	AT	✓	<i>Thermal Stability of Graft Modifications of PVC and Related Materials, Abbas, Journal of Polymer Science: Polymer Chemistry Edition, Vol. 13, 59-68 (1975)</i>

EXAMINER <i>Jeffrey Miller</i>	DATE CONSIDERED <i>5-82</i>
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
	AR	✓	<i>Cationic Grafting: The Synthesis, Characterization and Physical Properties of Poly (Vinyl Chloride-g-Isobutylene), Kennedy and Davidson, Polymer Prepr., Am. Chem. Soc., Div. Polymer Chem., (1974) 15, 209-213</i>					
	AS	✓	<i>Poly(vinyl Chloride-g-Butyl Rubber), Kennedy and Davidson, Journal of Polymer Science: Polymer Chemistry Edition, Vol. 14, 153-157 (1976)</i>					
	AT	✓	<i>Cationic Polymerization of Isobutylene from Poly (vinyl Chloride): Physical Properties of Poly(vinyl Chloride-g-Isobutylene), Kennedy and Davidson, Journal of Applied Polymer Science: Applied Polymer Symposium 30, 51-72 (1977)</i>					
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
8	AR	✓	Cationic Polymerization of Isobutylene from Poly (vinyl Chloride): Physical Properties of Poly(vinyl Chloride-g-Isobutylene), Kennedy and Davidson, <u>Journal of Applied Polymer Science</u> : Applied Polymer Symposium 30, 13-49 (1977)
8	AS	✓	Mechanism and Microstructure in the Free-Radical Polymerization of vinyl Chloride: Head to Head Addition Revisited, Stames and Wojciechowski, <u>Makromol. Chem. Macromol. Symp.</u> 70/71, 1-11 (1993)
8	AT	✓	New Structural and Mechanistic Chemistry in Polymerizations of Vinyl Chloride Initiated by Di-tert-alkylmagnesiums, Benedikt et al., <u>Macromolecules</u> , 30, (1997), 10-21

EXAMINER	J Eddy H 11/13	DATE CONSIDERED	1-02
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)		
	AR	<input checked="" type="checkbox"/> Intramolecular Hydrogen Transfers in Vinyl Chloride Polymerization: Routes to Doubly Branched Structures and Internal Double Bonds, Starnes et al., <u>Macromolecules</u> , (1998) 31, 1508-1517
	AS	<input checked="" type="checkbox"/> Thermal Degradation of some Model Compounds for Polyvinylchloride, Airinei et al., <u>Polymer Bulletin</u> , (Berlin) (1982), 7, 465-471
	AT	<input checked="" type="checkbox"/> Formation of Anomalous Structures in PVC and Their Influence on the Thermal Stability: 2. Branch Structures and Tertiary Chlorine, Hjertberg and Sorvik, <u>Polymer</u> , (1983), 24, June, 673-684

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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
J	AR	✓	Poly(Vinyl Chloride-g-Styrene): Synthesis, Characterization, and Physical Properties, Kennedy and Nakao, <u>Journal of Macromol. Sci.-Chem.</u> , A12(2), pp. 197-207 (1978)				
J	AS	✓	Structural Defects in Polyvinylchloride-I, Internal Unsaturation as Initiation Sites for Dehydrochlorination, Braun, Michel and Sonderhof, <u>European Polymer Journal</u> , Vol. 17, pp. 49-56, (1981), Pergamon Press,				
J	AT	✓	Monte Carlo Simulation of the Formation of Irregular Structures in Poly (vinyl chloride), Guyot, <u>Macromolecules</u> , (1986), 19, 1090-1096				
EXAMINER <i>Jeffrey M. L.</i>		DATE CONSIDERED <i>5-02</i>					
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
8	AR	✓	<i>Unsaturated End Groups in PVC-III</i> , Bezdadea, Buruiana and Carculacu, <u>European Polymer Journal</u> , (1971), Vol. 7, pp. 1649-1660, Pergamon Press
8	AS	✓	<i>On the Mechanism of the Polymerization of Poly(vinyl chloride)</i> , Caraculacu, Buruiana and Robila, <u>Journal of Polymer Science: Polymer Chemistry Edition</u> , Vol. 16, 2741-2745 (1978)
8	AT	✓	<i>Working Party on Defects in the Molecular Structure of PVC and Their Relation to Thermal Stability: General Conclusions</i> , Guyot, <u>Journal of Vinyl Technology</u> , (1985), 7(2), 92-94
EXAMINER <i>Jeffrey M. Hill</i> DATE CONSIDERED <i>5-02</i>			

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





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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AR	✓	Effects of Stabilizers During the Thermal Treatment of PVC. II. Correlation of Thermal Stability, Discoloration, and Stabilizer Exhaustion, Czako, <u>Plasty Kauc.</u> , (1975), 12(9), 259-261
	AS	✓	Investigation of Thermal Degradation of PVC in the Solid State, Levai, Ocskay, Szebeni, <u>Journal Macromol. Sci. Chem</u> (1978), A12(3), 467-477
	AT	✓	Colorimetric Characterization of the Discoloration of Thermally Treated PVC, Thielert, Schliemann, Figge, Agnew, <u>Makromol. Chem.</u> (1975), 47(1), 129-40

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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
	AR		Formation of Anomalous Structures in PVC and Their Influence on Thermal Stability-I, Endgroup Structures and Labile Chlorine Substituted by Phenol, Hjertberg and Soervik, <u>Journal Macromol. Sci., Chem.</u> , (1982), A17(6), 983-1004				
	AS		Organic Chemistry, 2 nd Edition, John McMurry, Cornell University, Brooks/Cole Publishing Company, Pacific Grove, California, 1998				
	AT		Designed Polymers by Carbocationic Macromolecular Engineering: Theory and Practice, J. P. Kennedy and B. Ivan, Hanser Publishers, Munich, Vienna, New York, Barcelona, Distributed in the U.S.A. and in Canada by Oxford University Press, New York, 1992				
EXAMINER 508805 null DATE CONSIDERED 5-82							
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		Applicant: Kennedy, et al.			
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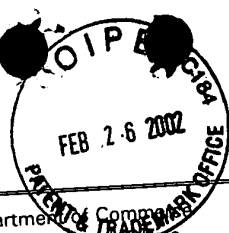
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<div style="font-size: 1.5em; margin-top: 10px;">JR</div>	AS		<i>Encyclopedia of Polymer Science and Engineering</i> , Volume 11, D. Freitag et al., John Wiley & Sons, pp. 648-718, 1988
	AT		

EXAMINER <i>Jeffrey Mullis</i>	DATE CONSIDERED <i>5-02</i>
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Sheet 1 of 1

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Patent and Trademark Office

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Atty. Docket No.:

EP 1021-CIP

Serial No.:

09/732,967

Applicant:

Joseph P. Kennedy, et al.

Filing Date:

December 8, 2000

Group: 1711

U.S. PATENT DOCUMENTS

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing date if appropriate
J	AA	3,296,230	1/3/67	Gateff et al.			
	AB	3,896,091	7/22/75	Fabris et al.			
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

J	AR	<input checked="" type="checkbox"/>	Thermal Stability of Graft Modifications of PVC and Related Materials, ABBAS et al., <u>Journal of Polymer Science</u> , Polymer Chemistry Edition, Volume 13, (1975), pp. 59-68, John Wiley & Sons, Inc.
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Jeff Mullis

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